REMARKS

Claims 106 to 124 are pending in this application. Examiner in an office action dated 4/16/2009 has rejected these claims for various reasons. Each of these rejections is responded to as follows:

1. Applicant has amended claims 106, 107, 109, 110, 111, 112, 113, 114, 117, 121, 122, 123 and 124 to better define the scope of invention and to overcome various claim objections including 35 USC 112, first and second paragraph rejections.

2. Examiner has objected to claims 109-113. Applicant has amended claims 112 and 113, as suggested by the Examiner by adding the word "system" in the preamble.

3. Examiner has rejected Claim 106 under 35 USC 112, first paragraph. Applicant has amended claim 107 (not 106), and has amended the terms encrypting and decrypting by encoding and decoding which is in the specification.

5. Examiner has rejected Claims 106-107, 113, 117 and 112 under 35 USC 112, second paragraph for various reasons. Applicant has amended these specific claims to comply with the second paragraph. Applicant believes these amendments make these claims compliant with the 35 USC 112, second paragraph.

6. The examiner has cited multiple prior art, as many as six, in different combinations to argue obviousness of various claims 106-124, citing in addition to what these art specifically teach, but what would have been obvious to one of ordinary skill in the art given these prior art, based on KSR v. Teleflex, that clarified the application of Graham v. Deere test of obviousness.

Before Applicant responds to each of these various obviousness rejections, applicant would first address the KSR and Graham ordinary skill in the art obviousness enquiry argument, given these cited prior art to one of ordinary skill in the art.

5   Applicant would like to note that as a general matter of knowledge and also related to the ordinary skill in the art that is related to bankcard driven payments systems, at the time of the filing of the current application, all bankcard based payment systems for payments to merchants that accepted bankcards for payment and had a bankcard payment infrastructure, required that the bankcard data from the customer

10   that included customer identity data such as name, card expiration and bank name and account number be transferred over to merchant computer systems and records via a merchant point-of-sale interface (POS).

After the bankcard data was then transferred or read into the merchant computer

15   systems, a payment authorization record was created by the merchant computer systems that combined in the payment record the customer bankcard data with a payment amount and merchant and transaction identifiers. This payment authorization record was then sent to a card authorization network via an intermediary service provider for processing and approving a payment transaction.

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Based on this general knowledge related to bankcard payment, the prior art did not teach or suggest any other modes or methods of bankcard driven payments to merchants to make a payment to a merchant using a bankcard, except for the merchant to receive bankcard data and then initiate and process a bankcard payment transaction

25   via a card authorization network.

The various prior arts cited by the examiner are all directed to solving one or more issues as they relate to use of bankcards at a merchant POS, such as, (i) customer having to carry a bankcard for payment (ii) customer having to carry multiple

30   cards in the wallet for conducting payment transactions, (iii) the bankcard having on its face customer identity and card account number, which would be subject to misuse, if

the card is stolen, (iv) reducing the cost of multiple individual Merchant POS terminals, and (v) anonymous card transactions that do not identity customer purchasing and shopping habits to the card issuing bank , that is do not identify the nature of payment transaction to the card issuing banks to protect the customer shopping date from sale

5   for the purpose of marketing.

To solve these various issues, the prior art teach versions of a bankcard that does not display customer name and card number and uses a customer identifier code and some on how such a pseudo bankcard would be used for a payment transaction in

10   conjunction with a remote database that would maintain customer bankcard data referenced by a customer identifier that would be on the bankcard.

Since Rose and Campisano prior art underlie all of the various obviousness rejections, these art are examined in detail first for the obviousness and ordinary skill in

15   the art enquiry issue.

Rose teaches different embodiments of the Rose payment card, as illustrated in Rose Figures 2 to 3A-E. These Rose embodiments cover from a blank card to a decorative card, to a card with or without a bank name, and a card where the customer

20   can etch or write his name initials. These different embodiments do not display the customer name and or bankcard number.

Rose et al further teaches a payment card, which has a code on the card. The code is associated with multiple bank accounts in a database at a remote location.

25   When the Rose card is used at an ATM/POS, the code from the card is read and routed to the database at the remote location. The database matches the code, and the database returns the identity of each account to the ATM/POS to be displayed on the ATM/POS screen, along with the PIN of each account. The user is asked to select from this list of accounts, a specific account to be used for this transaction and then asked to

30   enter the corresponding PIN for that account in the ATM/POS. The ATM/POS matches the PIN to identify the specific customer account and then forwards the specific account

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data to merchant systems and records for normal prior art payment transaction processing by the merchant.

Campisano is very similar to Rose, except in Campisano, instead of a bankcard, a customer identifier in the form of his/her telephone number is used. Campisano art is on a cardless payment system for credit card transactions. To be able to provide a cardless payment system that does not use a credit card, Campisano teaches a cardless payment system that uses an entry of the user's telephone number combined with a PIN, in lieu of his/her physical bankcard at a point of sale terminal. The telephone number and the PIN are linked to the card number in a card database that may be maintained by the card-issuing bank or the telephone company, as they have the ability to verify the telephone number. The actual card data from the card database is then transferred to the merchant systems for the merchant to process a payment transaction.

The Rose and Campisano prior art, individually and in combination teach convenience in use of bankcards and protection of customer data on the bankcard and use of a remote database that maintains customer bank account data, referenced by a customer identifier that would be on the pseudo bankcard.

First, In contrast to the cited prior art, the current application independent claims 109, 114 and 123 teach a payment card system with a customer identifier, that is first without customer identity data and then second, that customer identifier is encoded by reference to an algorithm to make even the customer identifier to be not on the card itself, but an encoded customer identifier, encoded in a specific manner that embeds a reference to an algorithm after the customer identifier is encoded with this specific algorithm.

These above described features related to protecting even a customer identifier without identity data, not relate to a customer in the database are not obvious over the cited art and would not have been obvious to those with ordinary skill in the art as those with the ordinary skill in the art were providing convenience in use of bankcards and not

additional security of an already anonymous customer identifier without customer identity with a reference to a coding algorithm maintained in the database, that codes the anonymous customer identifier on the card itself before encoding it on the card and before delivery of the card to the customer.

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This additional security measure as applied to the already anonymous customer identifier on the pseudo prior art bankcards serves no purpose to those of the ordinary skill in the art, as this measure is directed to security in the payment card system and not convenience in use of bankcards at the merchant POS interface.

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Second, in contrast, the current application claims 106, 109, 114, 123 and their dependent claims protect the customer id data from theft and misuse from the merchant computer systems themselves, while enabling a payment transaction with the help of the same merchant computer systems, including the existing POS interfaces, by not

15   transferring customer identity and bankcard data to merchant computer systems in the first place.

This is accomplished by an adapted prior art merchant gateway. A prior art merchant gateway is routing system that routes the payment authorization request

20   records that is originated by a payee merchant from any number of merchants to the banks globally using the first four digit of the card as a card issuing bank identifier.

One or more embodiments of the current invention, teach modification or adaptation of that prior art merchant gateway.

25   A prior art merchant gateway is simply a router or a router mechanism that routes payment authorization requests from merchants globally to the card authorization network globally based on the first four digits of a bankcard number and routes the corresponding payment approval records from the card authorization network to the merchants.

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The adapted prior art merchant gateway operates, (i) to receive a payment authorization request record from a merchant (ii) identity a payment authorization record with a non-standard bankcard, or a payment card, (iii) hold the routing transaction in hold status and route only the encoded customer identifier and the CPIN

5   to a payment card system, (iv) receive from the payment card system the customer bankcard data, (v) assemble a payment authorization record with the customer bankcard data and (vi) end the hold on the transaction by submitting the payment authorization record to a card authorization network, where the steps (ii) to (v) define the adaptation of the prior art merchant gateway, including its interface to the payment

10   card system. Whereas, the step (i) does not alter existing merchant interface to this prior art adapted merchant gateway and step (v) does not alter the existing interfaces of the prior art adapted merchant gateway to the card authorization network.

Thus enabling the adapted prior art merchant gateway to be transparent in its   .

15   operation to the merchants and the card authorization network, while protecting the customer identity and bankcard data from the merchant systems. For the description of the adapted prior art gateway, see specification page 6, lines 18 to 23; page 7, lines28 to page 8, lines 16; page 8, line 28 to page 9, line 21.

20   Those with the ordinary skill in the art at that time were not solving the issue of keeping the customer bankcard data from theft and misuse in the merchant computer systems themselves, and these prior art do not teach or fairly suggest to one of the ordinary skill in the art, that the customer data having being received by the Merchant POS is subject to theft from these systems and need to be protected from the merchant

25   systems themselves, as in addition to the merchant misusing the customer data, the data may be subject to theft from the interconnected via internet merchant computer systems as has been covered in many news stories, since the current application was filed.

30   The theft of data from the merchant computer systems was an issue that did not exist for those of the ordinary skill in the art, as their effort was directed for making

improvements in the bankcard itself and improvements in the merchant POS, and it was not directed to protecting bankcard customer identity data against theft and misuse from the merchant computer systems themselves.

5   Given that these cited prior art in any combination did not alter or change the underlying bankcard driven payment mechanism, as described earlier, from these prior art citations, the ordinary skills in the art pertain to computer networks, databases, and systems, specifically for the payment systems that includes the use of bankcards, to them, the issue of protecting the customer identity data from theft and misuse from the

10   merchant computer systems was not an issue and thus not obvious as an issue to be addressed.

The claims of the current invention while using the same merchant point of sale interfaces and merchant computer systems do not transfer customer identity data to

15   these same merchant computer systems, a novel and non-obvious accomplishment in itself and over the cited art and cited art to those with ordinary skill in the art, for the reasons as detailed above and thus protect the customer identity and bankcard data from theft and misuse from the merchant computer systems themselves.

20   Low et al is a very different art in how it accomplishes its stated objective of anonymous credit card transactions. Analyzing Low et al, Low teaches anonymous credit card transactions without disclosing the subject matter of the transaction to the institution providing the credit card (from Low Abstract).

25   From Low Figure 2, col. 3, lines 21 to col. 4, lines 24, Low creates two independent card-issuing bank entities, identified as Bc 203 and Bp 213, where Bc knows the customer identity and issues the anonymous card, and Bp, the bank that only manages money or credits that have been deposited in the account, and only knows the customer by a anonymous identifier. These pseudo banks Bc and Bp interface with

30   each other via an intermediary central bank Cx and the merchant bank Bs 237 via the same intermediary central bank Cx 227. The central bank Cx exchanges messages

between Bc, Bp and Bs using public key cryptography, without each of them knowing the true identity of each other but only a cryptographic identity, where each bank uses a cryptographic identification. Bc sends messages to Bp via Cx to transfer funds or credits and Bp sends messages to Bs via Cx to transfer funds.

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Low for its operation requires a smart card as it stores Bp cryptographic address, receives and stores Bp cryptographic address and fund amount for transferring them to Cx. The crypto address of Bp is already on the anonymous card and the crypto address of the merchant bank and the purchase amount is copied to the card at the merchant

10 sale terminal and the card then transfers these two crypto addresses and the fund amount to the central bank Cx 227 via message 233. This enables the central bank Cx 227 to transfer funds from the bank Bp to merchant bank Bs. When the Bank Bs notifies ·· the merchant S 245, the merchant then releases the goods to the customer.

15 While Bc may appear to be like current invention payment card system, it is not as Bc creates and sends itemized account statements to the customer, whereas current invention payment card system only delivers the payment card to the customer. Also there is no equivalent of Low's Bp, Cx, smart card, and use of public key cryptography in the current invention. Furthermore, Low would require unique to Low Merchant POS

20 that provide merchant bank's cryptographic identity the credit card of the customer, along with a dollar purchase amount for transfer to the central bank Cx.

Low does not teach features of claim 106 to 124 that use existing merchant POS and merchant systems and existing card authorization networks and an adapted

25 merchant gateway to protect customer id data from the merchant computer systems. Hence Low is wholly different in every aspect from the current invention claims. Thus Low does not make obvious any of the independent claims from 106-124, and thus also any of their dependent claims

30 Each of the various obviousness rejections is responded to as follows in light of the above arguments.

6.   Examiner had rejected under 35 USC 103(a) obvious rejection, claims 106 and 108 as being obvious over Rose et al in view of Campisano and further in view of Duyck, and further in view of Low et al.

These claims would not be obvious to those with ordinary skill in the art in view of arguments above related to Rose and Campisano. The additional citations do not teach or fairly suggest, or would be obvious to those with ordinary skill in the art, the features of claims 106 and 108, for the reasons as described above.

7.   Examiner had rejected under 35 USC 103(a) obvious rejection, the claim 107 as being obvious over Rose et al in view of Campisano, in view of Duyck, and further in view of Low et al, and further in view of Kramer...

These claims would not be obvious to those with ordinary skill in the art in view of arguments above related to Rose and Campisano. The additional citations do not teach or fairly suggest, or would be obvious to those with ordinary skill in the art, the features of claim 107 for the reasons as described above.

8.   Examiner had rejected under 35 USC 103(a) obvious rejection, claims 109-110, 114 and 123 as being obvious over Rose et al.

These claims would not be obvious to those with ordinary skill in the art in view of arguments above related to Rose and Campisano. The additional citations do not teach or fairly suggest, or would be obvious to those with ordinary skill in the art, the features of claims 109-110, 114 and 123 for the reasons as described above.

9.   Examiner had rejected under 35 USC 103(a) obvious rejection, claims 112, 115-116 as being obvious over Rose et al in view of Campisano.

These claims would not be obvious to those with ordinary skill in the art in view of arguments above related to Rose and Campisano. The additional citations do not teach or fairly suggest, or would be obvious to those with ordinary skill in the art, the features of claims 112, 115-116 for the reasons as described above.

10.   Examiner had rejected under 35 USC 103(a) obvious rejection, claims 111, as being obvious over Rose et al as applied to claim 109 and further in view of Campisano.

These claims would not be obvious to those with ordinary skill in the art in view of arguments above related to Rose and Campisano. The additional citations do not teach or fairly suggest, or would be obvious to those with ordinary skill in the art, the features of claims 111 for the reasons as described above.

11.   Examiner had rejected under 35 USC 103(a) obvious rejection, claims 113, as being obvious over Rose et al as applied to claims 109, 112 and further in view of Campisano and Low et al.

These claims would not be obvious to those with ordinary skill in the art in view of arguments above related to Rose and Campisano. The additional citations do not teach or fairly suggest, or would be obvious to those with ordinary skill in the art, the features of claim 113 for the reasons as described above.

12.   Examiner had rejected under 35 USC 103(a) obvious rejection, claims 117, as being obvious over Rose et al as applied to claims 114-116 and further in view of Low et al.

These claims would not be obvious to those with ordinary skill in the art in view of arguments above related to Rose and Campisano. The additional citations do not teach or fairly suggest, or would be obvious to those with ordinary skill in the art, the features of claim 117 for the reasons as described above.

13.   Examiner had rejected under 35 USC 103(a) obvious rejection, claims 118-120, as being obvious over Rose et al as applied to claims 114 and further in view of Albert et al and Duyck.

These claims would not be obvious to those with ordinary skill in the art in view of arguments above related to Rose and Campisano. The additional citations do not teach or fairly suggest, or would be obvious to those with ordinary skill in the art, the features of claims 118-120 for the reasons as described above.

14.   Examiner had rejected under 35 USC 103(a) obvious rejection, claims 121, as being obvious over Rose et al as applied to claims 114 and further in view of Albert et al and Duyck as applied to claims 118-120 above and further in view of Campisano

5 and Gillin et al.

These claims would not be obvious to those with ordinary skill in the art in view of arguments above related to Rose and Campisano. The additional citations do not teach or fairly suggest, or would be obvious to those with ordinary skill in the art, the features of claim 121 for the reasons as described above.

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15.   Examiner had rejected under 35 USC 103(a) obvious rejection, claims 122, as being obvious over Rose et al as applied to claims 114 and further in view of Albert et al and Duyck as applied to claims 118-120 above and further in view of Campisano and Gillin et al as applied to claim 121 above and further in view of Low et al.

15   These claims would not be obvious to those with ordinary skill in the art in view of arguments above related to Rose and Campisano. The additional citations do not teach or fairly suggest, or would be obvious to those with ordinary skill in the art, the features of claims 122, 114, 118-120, and 121 for the reasons as described above.

20   16.   Examiner had rejected under 35 USC 103(a) obvious rejection, claims 124, as being obvious over Rose et al as applied to claims 123 above and further in view of Campisano and Low et al.

These claims would not be obvious to those with ordinary skill in the art in view of arguments above related to Rose and Campisano. The additional citations do not teach or

25   fairly suggest, or would be obvious to those with ordinary skill in the art, the features of claim 124 for the reasons as described above.

Examiner cites KSR v. Teleflex, and its seven rationales to support 103 (a) rejections, under an obviousness enquiry. Applicant submits that KSR did not change

30   Graham v. Deere, the applicable law of obviousness, but clarified the application of Graham V. Deere test of obviousness, in those obviousness enquiry cases that

combine known elements according to known methods that yield predictable results that are in the purview of those with ordinary skill in the art.

5   The claims of the current invention do not provide known elements according to known methods as the scope of claims and the prior art cited by the examiner make it clear that those with ordinary skill in the art at that time were focused on providing convenience in use of bankcards and prevent theft of bankcards from the customer's possession. The prior art of record shows that those with the ordinary skill in the art at that time were not trying to provide security by protecting the bankcard identity data

10   from the merchants and merchant sale systems themselves. Security of bankcard data from the merchants themselves due to theft and compromise from their systems was not an issue to be solved in year 2001 in the purview of those with ordinary skill in the art at that time.
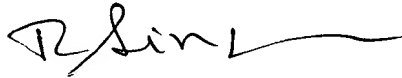
15   Therefore, Applicant submits that the claims 106 to 124 are not obvious over these prior arts, where these prior art individually or in any combination do not teach or suggest the invention in these claims and would not be obvious to those of ordinary skill at that time.

CONCLUSION

In conclusion, Applicant respectfully asserts that claims 106 to 124 are

5   patentable for the reasons set forth above, and that the application is now in a condition for allowance. Accordingly, an early notice of allowance is respectfully requested. The Examiner is requested to call the undersigned at 310-540-4095 for any reason that would advance the instant application to issue.

10   Dated this the 15th day of July, 2009

Respectfully submitted,

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